

## UNITED STATES PATENT AND TRADEMARK OFFICE

ENITED STATES DEPARTMENT OF COMMERCE Enited States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,829		02/28/2002	Don Elrod	LYNN/0151	3470
24945	7590	11/03/2004		EXAMINER	
STREETS (			EINSMANN, MARGARET V		
SUITE 355				ART UNIT	PAPER NUMBER
HOUSTON, TX 77040				1751 DATE MAILED: 11/03/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Comment	10/084,829	ELROD, DON					
Office Action Summary	Examiner	Art Unit					
	Margaret Einsmann	1751					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on	<u>.</u> .						
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims 1, 1, 1, 18-20 3 (D. 5.3							
Disposition of Claims $27-26$ , $28-30$ , $34-53$ 4) Claim(s) $\frac{7-19}{2}$ is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) is/are tallowed.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
_		,					
9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.05(a).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2)	Paper No(s)/Mail Date 5) Notice of Informal Pat 6) Other:	e					
Patent and Trademark Office							

Application/Control Number: 10/084,829

Art Unit: 1751

## **DETAILED ACTION**

Applicant's election without traverse of Group I, claims 17-19, 21 and 30 in the reply filed on 5/18/04 is acknowledged.

Claims 1-6, 20 and 31-33 are drawn to a non-elected invention and must be canceled before allowance of any claims.

Claim 27 has been canceled.

The claims being examined in this action are 7-19, 21-26, 28-30, 34-53. The examiner notes that NEW claim 43 contains the incorrect status identifier (previously presented). However in the interest of compact prosecution, the elected claims are being examined.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 17-19, 21-26, 28-30,34-53 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Calcaterra et al., US 4,810,567.

Calcaterra discloses fabrics having the same properties as the claimed fabrics. Said fabrics are formed by grafting a polymerisable monomer onto a fabric surface after forming peroxide groups and decomposing the peroxide groups with an iron catalyst. In column 7 lines 48 et seq, the process as claimed

Application/Control Number: 10/084,829

Art Unit: 1751

is disclosed, wherein a ferrous ion-hydrogen peroxide redox system is used to form the oxygen radicals used to graft the monomers onto the fabric of fibers. The process is taught as being equivalent to several other redox systems for initiating graft polymerization. The process is summarized in col 8 line 54 et seq. The fabric formed is tested for its antimicrobial properties, and provides protection from E. coli and S. aureus as claimed. See col 11 lines 18-37. Accordingly the products formed by the method of Calcaterra et al. anticipate the product formed by applicant's claimed process. Regarding the limitation of claims 25 and 26, in column 1 the introduction explains that an improved fabric for surgical draping and other items used in hospital settings is needed. Regarding the limitations of claims 28-30, the product of the reference is not taught to have substantial disruption of interfiber adhesion and is not taught to have a substantial loss of fabric strength, tensile strength, tear resistance or abrasion resistance.

Applicant has added a phrase to claim 23 wherein the grafted fabric comprises a disinfectant that is a polymerizable monomer or a derivative of a polymerizable monomer. In column 8 patentee describes methods of chain termination. One method is by the addition of oxygen to form a peroxy radical which then abstracts ah hydrogen, in which case the end group T is the hydroperoxy group , OOH. Whenever this method of termination occurs, the limitation of the claims are met since the hydroperoxy group is a disinfectant. See col 8 24 et seq.

Regarding the limitations of claims 34 and its dependent claims, this section in column 8 of Calceterra discloses that that fabric comprises a vinylic monomer (inclusive of the acrylic acid monomer as claimed) terminated by a hydroperoxy group. Accordingly Calceterra's disclosed fabric comprising a hyperperoxy group vinyl monomer has the claimed properties absent evidence to the contrary.

The subject matter would have been obvious to the skilled artisan because the patentability of a product by process claim does not depend on its method of production and where the examiner has found a similar product, the burden rests with the applicant to prove that that product is patentably distinct. See In re Thorpe, 227 USPQ 964 (CAFC 1985); In re Marosi et al, 218 USPQ 289; In re Pilkington, 162 USPQ 145.

"The lack of physical description in a product-by-process claim makes the determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not the process that must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 173 USPQ 685,688 (CCPA 1972).

## Response to Amendments and Arguments

Applicant's arguments filed September 2, 2004 have been fully considered but they are not persuasive regarding the above rejection. Applicant argues that Calceterra does not disclose a fabric that attaches a carboxylic acid onto the fabric that is then oxidized into a regenerable percarboxylic acid for protection against chemicals. The disclosure at column 8 lines 34 which discloses chain termination by way of a hydroperoxy group which is applicant's claimed disinfectant. Additionally, the fabric is being examined, not the method of forming it. The fabric of Calceterra has the same properties as the claimed fabric. The fabric formed was tested for its antimicrobial properties, and provides protection from E. coli and S. aureus as claimed. See col 11 lines 18-37. Those are the same qualities that applicant claims. Applicant states that Calceterrea does not disclose disinfectants bonded to a fabric. The only disinfectant applicant discloses is the percarboxylic acid. Calceterra discloses the –OOH acid radical as a terminating group in column 8 line 41.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 34-53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contain subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant has added new claims 34-53 to this application without pointing to basis for the claim limitations. Where in the originally filed specification is there described a protective fabric for protection against *chemicals*?

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 571-272-1314. The examiner can normally be reached on 7:00 AM -4:30 PM M-W and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 29, 2004

Margaret Einsmann Primary Examiner Art Unit 1751

Margrettenoma